SPECIAL REPORT

Suicidal Behavior in the Elderly

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Assessment and treatment of suicidal patients is one of the most difficult and anxiety-provoking tasks for mental health care professionals. In the case of elderly patients who may often talk about death and dying, assessing suicide risk is even more challenging.

Epidemiological data may help to understand risk and protective factors but they cannot guide the evaluation of individual patients. Suicide rates vary greatly with age, gender and ethnicity. The elderly population has the highest suicide rates in almost all countries in the world where data are available. Some countries follow the Hungarian pattern (i.e., suicide rate increases with age in both genders), while others show the U.S. pattern (i.e., suicide rate increases with age only in men). The elderly (65 and over) made up 12.4% of the U.S. population in 2001 while they represented 17.6% of suicides (McIntosh, 2003). Men accounted for about four out of five completed suicides in the 65 and older age group over the past two decades. This is partly explained by the fact that men are more likely to use more lethal methods of suicide. Seventy-six percent of men and 33% of women who completed suicide used firearms, while 3% of men and 33% of women who completed suicide overdosed on medications (McIntosh, 2003).

The suicide rate of white, Chinese-American, Japanese-American and Filipino-American men increases with age. In comparison, the middle-aged group of African-American, Hispanic, Native American and Alaskan Native men have the highest suicide rate. As a consequence of the gender and ethnic differences in the United States, the suicide rate by age 80 ranges from 3/100,000 among African-American women to 60/100,000 among white men (McIntosh, 2003).

Investigating risk factors and protective factors across ethnic groups may help to understand the unexplained striking differences in suicide rates.

Risk Factors

So far, identified risk factors for suicide attempts and completed suicides in late-life include past history of suicidal behavior, depression, substance abuse, hopelessness and certain personality characteristics (e.g., rigidity and lack of openness to new experience) (Duberstein et al., 1994).

The role of medical comorbidity is controversial, as medical illness in general is frequent among the elderly; previous non-controlled studies may have overestimated its role. One case-controlled study from New Zealand failed to find differences in physical illness (Beautrais, 2002), while a Swedish study found that visual impairment and neurological and malignant disease were associated with suicide risk (Waern et al., 2002a). Interestingly, this association was only true for men. This finding needs to be replicated prior to further interpretation due to the small sample size of women.

A preliminary unpublished data from a Hungarian psychological autopsy study conducted by my colleagues and me indicated that fear of serious physical illness plays an important role in late-life suicide. In addition to anticipatory anxiety, change in functional status and pain may be better correlates of suicidality than physical illness itself.

Physical illness may contribute to suicidality in another way. Waern and colleagues (1999) found that physicians were less likely to discuss suicidal feelings with patients in poor physical health. If depression is detected in an elderly patient, suicidal feelings should also be evaluated.

The most robust predictor of completed suicide is a past history of suicide attempt. According to data from middle-aged groups, up to 40% of individuals who eventually committed suicide made a prior suicide attempt (Rubenowitz et al., 2001). In addition, lethality and suicide intent increased in those who repeatedly attempted suicide. Although the attempt to completion ratio is much smaller in the elderly than in younger age groups (4:1 versus 10:1 in the general population), 56% of elderly women and 30% of elderly men who committed suicide had a prior suicide attempt. During their final year of life, suicide attempts were made by 20% of the elderly who died by suicide (15% males, 28%) females). Suicide attempts by the elderly considered to be "failed suicides"--as these attempts are often long-planned--involve highly lethal methods that, in addition to the fact that older patients are medically frail and frequently live alone, increase the probability of a fatal outcome. The rare but highly lethal attempts and the fact that 70% of elderly men who die by suicide did not have a prior suicide attempt have two implications for clinical practice: 1) elderly patients who attempt suicide in late-life are at a very high risk for completed suicide, 2) the suicide risk of older men may be more difficult to detect than the risk of older women as they are less likely to have had a history of previous attempts.

Depression

Depression is the most common diagnosis in elderly suicide attempters and suicide completers. The association of mental disorders with risk for completed suicide in the elderly is shown in the Table (Waern et al., 2002b). (*Due to copyright concerns, this table cannot be reprinted online. Please see p52 of the print edition--Ed.*) In the only U.S. case-controlled psychological autopsy study, 71.4% of the elderly who died by suicide suffered from mood disorders and 35.7% had a substance use disorder (Conwell et al., 1996).

When patients report sad mood or loss of interest in previously pleasurable activities, appear to be depressed, or have an increase in substance abuse, questioning patients if they have been feeling sad to the point that they were thinking about death or dying is helpful for evaluation. Direct questions about suicidal ideation should also follow. Patients should also be questioned if family members report changes in mood.

High symptomatic levels of depression, hopelessness, complicated grief and anxiety, and lower levels of perceived support are associated with suicidal ideation (Szanto et al., 1998, 1997). A secondary analysis of 395 elderly subjects treated for a current major depressive episode found that, at the beginning of treatment, 77.5% of patients reported suicidal ideation, thoughts of death or feelings that life is empty (Szanto et al., 2003). By week 12, suicidal ideation had resolved in all treated patients although 4.6% still reported thoughts of death. While suicidal ideation resolved early in treatment, many of the patients who reported suicidal ideation at the beginning of treatment had recurrent thoughts of death that lasted for weeks. Thoughts of death persisted in 8% of the participants up to 12 weeks.

Patients who had suicidal ideation or had recurrent thoughts of death had poorer treatment response than non-suicidal patients. These moderate- to high-risk patients had a median time to response of six and five weeks, respectively, compared to low-risk patients with a median time to response of three weeks. Patients received antidepressant treatment with a tricyclic antidepressant (nortriptyline [Aventyl, Pamelor]) or a selective serotonin reuptake inhibitor (paroxetine [Paxil]) in combination with weekly interpersonal psychotherapy. Rates of remission were significantly lower in the moderate- to high-risk patients than the low-risk patients. These findings show that it is crucial to develop a more focused suicide intervention that will target clinical characteristics that are associated with suicidality.

It is striking that another study at the other end of the life span found similar results. In a clinical trial, the impact of suicidality on treatment course and outcome of adolescents with depression was studied (Barbe et al., in press). The results showed that adolescents who are suicidal and depressed had a higher dropout rate and were more likely to be depressed at the end of treatment. The relationship between suicidality and treatment response was mediated by severity of depression and hopelessness at intake.

Conclusion

Suicide-specific treatments that target not only depression, but also hopelessness, anxiety and substance use are needed. Treatment should involve a significant other whenever possible to help motivate the patient to remain in treatment, comply with pharmacotherapy and psychotherapy, and abstain from alcohol. When working with suicide attempters, clinicians should inquire whether there was suicidal communication before the suicide attempt. In a non-blaming manner, clinicians should explore how the significant other felt about this and how they reacted to this communication. It is frequent for significant others to deliberately ignore suicidal communication and this may be a

significant factor that further increases a sense of isolation and despair in a suicidal elderly person.

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